

Appl. No. 10/605,301
Amdt. dated Aug. 25, 2005
Reply to Office Action mailed June 7, 2005

REMARKS

In the Office Action, the disclosure was objected to because of spelling errors in paragraphs 0019 and 0022, claim 4 was rejected under 35 USC 112, second paragraph, because of spelling errors, claims 1-3 and 5 were rejected under 35 USC 102(b) as anticipated by USP 4,710,298 to Noda et al., claim 4 was rejected under 35 USC 103(a) as being unpatentable over Noda et al. in view of US Patent Application Publication No. 2003/0168401 to Koslow or USP 5,284,634 to Strominger et al, and claims 1-3 and 5 were provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of copending Application No. 10/904,219. No other objections or rejections were made in this Office Action. The applicants respond as follows:

Objection to disclosure

Paragraphs [0019] was objected to because of the misspelling of the phrase "is a" as "isa", and [0022] was objected to because of the misspelling of the words "dimethylimino" and "polydimethylallyl" as "dimethylinino" and "polydimethyliallyl". In response, the applicants have corrected these errors, and respectfully submit that this objection has been overcome.

Rejection under 35 USC 112, second paragraph

Claim 4 was rejected under 35 USC 112, second paragraph, because of the misspelling of the words "dimethylimino" and "polydimethylallyl" as "dimethylinino" and "polydimethyliallyl". In response, the applicants have corrected these errors, and respectfully submit that this rejection of claim 4 has been overcome.

Rejection under 35 USC 102(b)

Claim 1-3 and 5 were rejected under 35 USC 102(b) as being anticipated by USP 4,710,298 to Noda et al., on the ground that the Noda reference discloses the filter aid or auxiliary comprised of a cellulosic material and cationic polymer flocculating agent. The applicants respectfully submit that the Noda reference does not anticipate the filter aid as presently claimed.

Independent claim 1 now recites a filter aid comprising a cellulosic material and a cationic polymer flocculating agent, in which the filter aid is capable of removing metal particles from an oil-in-water emulsion. The Noda reference discloses an auxiliary for the dewatering of sludge, a method for the use thereof, and a method for the manufacture thereof. More particularly, the Noda reference appears to be directed toward the removal of water

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from organic sludge found in sewage and the like, and claims to be particularly effective in dewatering sludge having an organic content of not less than 40% by weight. The Noda reference neither teaches nor suggests a filter aid that is capable of removing metal particles from an oil-in-water emulsion. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. MPEP 2131. The applicants respectfully submit that each and every element as set forth in currently amended claim 1 cannot be found, either expressly or inherently, in the Noda reference, and thus claim 1 is not anticipated by the Noda reference.

In addition, independent claim 14 now recites a filter aid comprising a cellulosic material and a cationic polymer flocculating agent, in which the filter aid is capable of removing metal particles from an oil-in-water emulsion while allowing water-soluble organic compounds to pass therethrough. The applicants respectfully submit that the Noda reference also fails to anticipate claim 14. The Noda reference neither teaches nor suggests a filter aid that is capable of removing metal particles from an oil-in-water emulsion while allowing water-soluble organic compounds to pass therethrough. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. MPEP 2131. The applicants respectfully submit that each and every element as set forth in currently amended claim 14 cannot be found, either expressly or inherently, in the Noda reference, and thus claim 14 is not anticipated by the Noda reference.

Furthermore, independent claim 19 now recites a filter aid comprising a cellulosic material, and a cationic polymer flocculating agent comprised of a cationic amine or imine salt polymer selected from the group consisting of poly(oxyethylene)(dimethylimino)ethylene(dimethylimino)ethylene dichloride and tetraalkyl quaternary ammonium chloride. The applicants respectfully submit that the Noda reference also fails to anticipate claim 19, because it fails to teach or suggest a filter aid comprising one of the recited cationic polymer flocculating agents. A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. MPEP 2131. The applicants respectfully submit that each and every element as set forth in currently amended claim 19 cannot be found, either expressly or inherently, in the Noda reference, and thus claim 19 is not anticipated by the Noda reference.

Rejection under 35 USC 103(a)

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Claim 4 was rejected under 35 USC 103(a) as being unpatentable over Noda et al. in view of US Patent Application Publication No. 2003/0168401 to Koslow or USP 5,284,634 to Strominger et al. The applicants respectfully submit that this rejection has been rendered mute in view of the amendments to independent claim 1 noted above.

In addition, with respect to new claims 14-21, the applicants respectfully submit that neither the Koslow nor Strominger references disclose or suggest a filter aid that is capable of removing metal particles from an oil-in-water emulsion, or one which allows water-soluble organic compounds to pass therethrough. Furthermore, the Koslow reference discloses the use of a cationic metal complex as a flocculating agent, not a simple cationic polymer as currently recited in the claims. Finally, neither the Koslow nor Strominger references disclose or suggest a cationic polymer flocculating agent comprised of a cationic amine or imine salt polymer selected from the group consisting of poly(oxyethylene)(dimethylimino)ethylene(dimethylimino)ethylene dichloride and tetraalkyl quaternary ammonium chloride. For these reasons, as well as others, the applicants respectfully submit that the combination of the Noda reference with either the Koslow or Strominger references cannot be used to form a prima facie case of obviousness under 35 USC 103(a) with respect to the currently pending claims.

Provisionally rejection under doctrine of obviousness-type double patenting

Claims 1-3 and 5 were provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over claims 1-3 of copending Application No. 10/904,219. In response, the applicants (through their attorney) have submitted the attached Terminal Disclaimer, and have thereby overcome this rejection.

Conclusion

In view of the aforementioned amendments and remarks, the applicants submit that the currently pending claims are in condition for allowance. Reconsideration is respectfully requested.

Sincerely,



Steven Roberts
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